

# **FOLDABLE TABLE FOR NOTEBOOK COMPUTER**

## **BACKGROUND OF THE INVENTION**

### **1. Field of the Invention**

The present invention relates to a foldable table for a notebook  
5 computer, and more particularly to a foldable table that can be used for  
supporting the notebook computer and can be folded when not in use, thereby  
saving space of storage and transportation.

### **2. Description of the Related Art**

A conventional notebook computer is light and portable to facilitate a  
10 user carrying and operating the notebook computer. However, when the  
notebook computer is used at an outdoor place without providing a table or any  
support object, the user has to place the notebook computer on his legs for use,  
thereby greatly causing inconvenience to the user when operating the notebook  
computer outdoors.

## **SUMMARY OF THE INVENTION**

The primary objective of the present invention is to provide a  
foldable table for a notebook computer, wherein the foldable table when being  
extended outward can be used for supporting the notebook computer, and the  
foldable table when being folded can be used for carrying the notebook  
20 computer, thereby facilitating the user carrying and operating the notebook  
computer.

Another objective of the present invention is to provide a foldable table for a notebook computer, wherein the foldable stands are fully expanded to support the main board, so that a user seated on a chair can use the notebook computer supported on the main board easily and conveniently.

5           A further objective of the present invention is to provide a foldable table for a notebook computer, wherein the foldable table is folded when not in use, thereby saving space of storage and transportation.

In accordance with the present invention, there is provided a foldable table for a notebook computer, comprising:

10           a main board;  
            two foldable stands each pivotally mounted on the main board; and  
            a locking unit mounted on the main board for locking the two foldable stands when the two foldable stands are folded on the main board.

            Further benefits and advantages of the present invention will become  
15   apparent after a careful reading of the detailed description with appropriate reference to the accompanying drawings.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

            Fig. 1 is a perspective view of a foldable table for a notebook computer in accordance with the preferred embodiment of the present  
20   invention;

Fig. 2 is a perspective view of the foldable table for a notebook computer in accordance with the preferred embodiment of the present invention;

Fig. 3 is a schematic perspective view showing usage of the foldable  
5 table as shown in Fig. 1;

Fig. 4 is a schematic folded view of the foldable table as shown in Fig.  
2;

Fig. 4A is a partially enlarged view of the foldable table as shown in  
Fig. 4;

10 Fig. 5 is a partially cut-away plan cross-sectional view of the foldable  
table as shown in Fig. 2;

Fig. 6 is a schematic operational view of the foldable table as shown  
in Fig. 5; and

Fig. 7 is a partially cut-away plan cross-sectional view of the foldable  
15 table as shown in Fig. 4.

### **DETAILED DESCRIPTION OF THE INVENTION**

Referring to the drawings and initially to Figs. 1-3, a foldable table for a notebook computer 4 in accordance with the preferred embodiment of the present invention comprises a main board 1, two foldable stands 2 each  
20 pivotally mounted on the main board 1, and a locking unit 3 mounted on the main board 1 for locking the two foldable stands 2 when the two foldable stands 2 are folded on the main board 1.

The main board 1 has a first face formed with a rectangular receiving recess 11 for receiving the notebook computer 4 as shown in Fig. 3 and a second face formed with a receiving space 13 as shown in Fig. 2. The main board 1 has a periphery formed with four opposite through holes 12 for passage  
5 of two spaced flexible binding straps (not shown) so as to fix the notebook computer 4 in the receiving recess 11 of the main board 1.

Each of the two foldable stands 2 is pivoted on the main board 1 to be received in the receiving space 13 of the main board 1 as shown in Fig. 4.

Each of the two foldable stands 2 includes two opposite outer tubes  
10 22 each pivotally mounted on the second face of the main board 1, two opposite inner tubes 21 each retractably mounted on a respective one of the two outer tubes 22 by an elastic locking member 221, and a substantially U-shaped support frame 23 mounted between the two outer tubes 22. Each of the two inner tubes 21 is formed with a plurality of adjusting holes 211, and the  
15 elastic locking member 221 is mounted in either one of the adjusting holes 211 of each of the two inner tubes 21. The support frame 23 has a mediate portion formed with a locking groove 231.

Referring to Fig. 5 with reference to Figs. 1-4, the locking unit 3 is rotatably mounted on the main board 1 and includes a substantially T-shaped  
20 support pin 31 secured on the second face of the main board 1, a substantially T-shaped rotation member 35 rotatably mounted on the second face of the main board 1 and having an end formed with two outward extending press bars 33,

and an elastic member 32 mounted on the support pin 31 and urged between the support pin 31 and the rotation member 35.

Preferably, the rotation member 35 has an inside formed with a recess 34 for receiving the support pin 31 and the elastic member 32, and the elastic member 32 has a first end urged on an enlarged end 310 of the support pin 31 and a second end urged on a wall of the recess 34 of the rotation member 35.

In operation, referring to Figs. 4-7 with reference to Figs. 1-3, the locking unit 3 is rotated on the main board 1 to move to a first position as shown in Fig. 2 where the two press bars 33 of the rotation member 35 are parallel with the support frame 23 of each of the two foldable stands 2. Then, each of the two foldable stands 2 is pivoted on the main board 1 to be received in the receiving space 13 of the main board 1 as shown in Fig. 4. Then, the locking unit 3 is rotated on the main board 1 to move to a second position as shown in Fig. 4 where the two press bars 33 of the rotation member 35 are vertical to the support frame 23 of each of the two foldable stands 2, and each of the two press bars 33 of the rotation member 35 is locked in the locking groove 231 of the support frame 23 of a respective one of the two foldable stands 2 as shown in Figs. 4A and 7, so that each of the two foldable stands 2 is folded in the receiving space 13 of the main board 1 and fixed by the locking unit 3.

At this time, the two press bars 33 of the rotation member 35 are moved outward relative to the main board 1 to compress the elastic member 32, so that each of the two press bars 33 of the rotation member 35 is urged on the support frame 23 of a respective one of the two foldable stands 2 by the elastic  
5 force of the elastic member 32 as shown in Fig. 6.

Although the invention has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present invention. It is, therefore, contemplated that the appended  
10 claim or claims will cover such modifications and variations that fall within the true scope of the invention.